



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/649,088

08/07/2000

Shrikumar Hariharasubrahmanian

SHRIKUMAR

5951

7590

08/12/2004

ROBERT A. CESARI
CESARI AND MCKENNA, LLP
88 BLACK FALCON AVENUE
BOSTON, MA 02201

EXAMINER

BLOUNT, STEVEN

ART UNIT

PAPER NUMBER

2661

9

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/649,088

Applicant(s)

HARIHARASUBRAHMANYAN,
SHRIKUMAR

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/21/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2661

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 8 and 11 are rejected under 35 U.S.C. 112 first paragraph for failing to provide a specification that would enable one of ordinary skill in the art to make and use the invention.

In claims 8 and 11, there is no support for placing a pseudoheader after the protocol header and before the protocol data field.

Claim Rejections - 35 USC § 103

3. Claims 1 – 17 and 21 - 30 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,590,903 to Hofers et al in view of applicants admitted prior art (AAPA).

With regard to claims 1 and 21, Hofers teaches protocol conversion using a pseudo-header comprised of information within a frame. Hofers et al does not however teach the use of a reply packet, or a validity check.

AAPA teaches replying in page 3, third to last line. Further, validity checking through such means as FCS are extremely well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Hofers with a reply means, in light of the teachings of AAPA, in order to provide a means for allowing for more reliable communication.

Art Unit: 2661

With regard to claim 8, see col 5 lines 30 and 60+, and note that it would be obvious to have the pseudo-header after the protocol header field and before the data field, as having it in the data field is an obvious equivalent to having it before the data field.

With regard to claims 2 and 5 – 6, TCP and UDP are mentioned in AAPA.

With regard to claims 3 - 4 and 7, see the rejections above.

With regard to claim 11, see the rejection of claim 8 above, and note that the process is implementable in a computer using a program stored on a computer readable medium.

With regard to claim 9, a reply is mentioned on page 3, third to last line.

With regard to claim 10, checking is performed throughout column 6.

With regard to claims 11 – 17 and 21 – 25, see the above rejections.

With regard to claim 26, see how in col 6 lines 53+ it is stated how the protocol word is formed.

With regard to claims 27 – 29, see the rejection of claim 1 above.

With regard to claim 30, in col 7, lines 67+, the application layer ignores the areas of the pseudoheader that have zeroes in them.

4. Claims 18 – 20 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,590,903 to Hofers et al.

With regard to claim 18, see col 2 lines 25+ and note that while the identification of the "prefix" is not explicitly mentioned, the teachings provided in Hofers et al would render this obvious.

Art Unit: 2661

With regard to claims 19 – 20, see the rejections above.

5. Claims 1, 8, 11, and 21 are rejected under 35 U.S.C. 103(a) as being obvious over the printed publication "Open Systems Interconnect (OSI) model" by Brian Brown (1999, hereinafter referred to as "Brown") in view of the applicants admitted prior art (AAPA).

With regard to claim 1, Brown teaches the process of encapsulation in the OSI model to comprise generating a packet with a header that is formatted in accordance with a first protocol (for example, the application header shown on page 3) wherein a "pseudoheader" is then formatted (such as the header for the session layer) in accordance with additional constraints which are defined by the (session layer) protocol wherein the additional constraints contain additional procedures to those in the first protocol and also the other protocols (for example, the protocol associated with the presentation layer). The encapsulated packet is then sent to the receiver. Brown does not however teach the use of a reply packet. This is taught in AAPA. See page 3, third to last line. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a reply packet in the process of Brown in order to assure that the communication was reliably received.

With regard to claim 8, see the above, and note that a processor and memory are taught in AAPA, page 4, lines 2 – 3.

With regard to claim 11, see the above and note that additional memory resources are not required to add the pseudoheader.

Art Unit: 2661

With regard to claim 21, see the above, and note that when a new header is added, this is the equivalent of applying processes in accordance with a different protocol.

Response to Arguments

6. Applicant's arguments filed 5/21/04 have been fully considered but they are not persuasive.

With regard to the 112 first paragraph rejections, the applicant states that the data may be broken into separate data fields 326. However, these fields 326 are not shown, and the only reference to member 326 in the specification that the examiner can locate is on page 14, which states "The transport layer 320 may attach a header 322 and trailer 324 onto the data field containing the packet 312, or a packet from 326, in accordance with the specifications of the relevant transport protocol." The examiner believes that this does not give support for claims 8 and 11 with respect to placing a pseudoheader after the protocol header and before the protocol data field.

With regard to applicants arguments with respect to Yokoyama/Hofers, they are moot in view of the fact that these rejections have been withdrawn.

With respect to applicants arguments regarding the Hofers/AAPA rejections, the examiner notes that with regard to applicants argument that Hofers does not teach the use of additional constraints, the examiner notes that, at the very least, one of the protocol words P is used to indicate a stop bit. See col 6, lines 59+ and also col 8, lines 44+. The examiner further notes that, taken in their entirety, the acts of the stop bits and determining how many data words (see col 6, lines 3+) are really obvious forms of an

Art Unit: 2661

additional constraint, since they indicate how (or possibly whether) the system will process the data.

Conclusion


7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30 P.M.


Ajit Patel
Primary Examiner

SB


8/4/04